Name:

at1113exam: Expand, factor, and solve quadratics (v305)

1. Expand the following expression into standard form.

$$(2x + 7)(2x - 7)$$

2. Expand the following expression into standard form.

$$(9x - 5)^2$$

3. Expand the following expression into standard form.

$$(9x + 8)(2x + 5)$$

4. Solve the equation.

$$(9x - 4)(3x + 2) \;=\; 0$$

5. Solve the equation.

$$6x^2 + 9x - 7 \;=\; 3x^2 + 4x + 5$$

6. Factor the expression.

$$25x^2 - 64$$

7. Solve the equation with factoring by grouping.

$$10x^2 + 15x + 12x + 18 \;=\; 0$$

8. Factor the expression.

$$x^2 + 11x + 24$$